

FAN.CNT 2

DATE _____

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

PRAI JP 2003-175646 A 20030620

AB Disclosed is a product of the copptn. of 2-(1-isopropoxy-carbonyloxy-2-methylpropyl)-7,8-dimethoxy-4(5H),10-dioxo-2H-1,2,3-triazolo[4,5-c][1]benzoazepine (I) and a water-soluble polymer. The copptn. product is excellent in solubility and absorbability. Crystalline I and Me cellulose were dissolved in DMSO. The mixture was dropped into an aqueous solution containing Me cellulose to give ppts., which showed a solubility 16.8 µg/mL, as compared to 0.8 µg/mL for crystalline I.

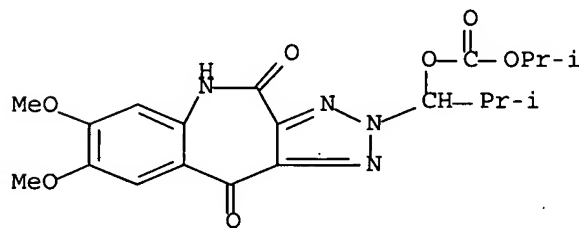
IT 222633-22-9

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(copptn. of sparingly soluble tricyclic triazolobenzazepine derivative and water-soluble polymer for improving solubility)

RN 222633-22-9 CAPLUS

CN Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 1-methylethyl ester (9CI) (CA INDEX NAME)



RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:1154716 CAPLUS Full-text
 DN 142:100324
 TI Tricyclic triazolobenzazepine derivative produced as novel crystalline substance
 IN Kitahara, Shinichi; Yamaguchi, Toshihiro
 PA Meiji Seika Kaisha, Ltd., Japan
 SO PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004113343	A1	20041229	WO 2004-JP8729	20040621
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI JP 2003-175347 A 20030619

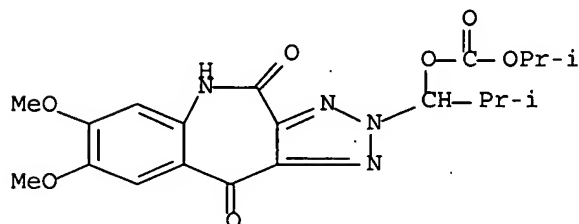
AB Crystalline 2-(1-isopropoxycarbonyloxy-2-methylpropyl)-7,8-dimethoxy-4(5-H),10-dioxo-2H-1,2,3-triazolo[4,5-c][1]benzazepine (I) (X ray crystallog. data given) is claimed. The crystals of I of this invention have high solubility and bioavailability. Crystallization of I from DMF and water gave β type crystals of I. I is an antiallergic agent.

IT 222633-22-9

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (tricyclic triazolobenzazepine derivative produced as novel crystalline substance)

RN 222633-22-9 CAPLUS

CN Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 1-methylethyl ester (9CI) (CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

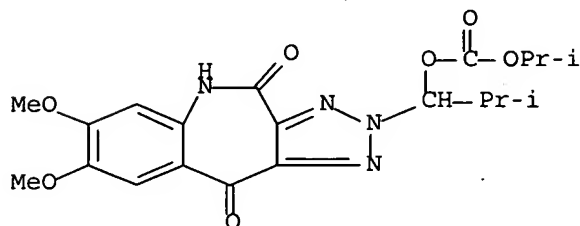
App's

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:532667 CAPLUS Full-text
 DN 139:90493
 TI Amorphous substance of tricyclic triazolobenzazepine derivative
 IN Ishikura, Toyoaki; Ishizawa, Takayuki; Suemune, Kenji; Ishiwata, Mayumi;
 Udagawa, Chikako
 PA Meiji Seika Kaisha, Ltd., Japan
 SO PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003055886	A1	20030710	WO 2002-JP13558	20021225
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2471651	AA	20030710	CA 2002-2471651	20021225
	EP 1466914	A1	20041013	EP 2002-790871	20021225
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2005130955	A1	20050616	US 2003-500071	20021225
PRAI	JP 2001-393016	A	20011226		
	WO 2002-JP13558	W	20021225		

AB Disclosed are amorphous 2-(1-isopropoxycarbonyloxy-2-methylpropyl)-7,8-dimethoxy-4(5H),10-dioxo-2H-1,2,3-triazolo[4,5-c][1]benzazepine (I), which is improved in absorbability and solubility; and a medicinal composition containing the compound Also provided are processes for producing amorphous compound I and for producing a medicinal composition containing the compound An amorphous compound I was dissolved in methylene chloride, and mixed with Me cellulose (Metolose SM15) and methanol. The mixture was then spray dried to obtain an amorphous powder of the present invention.

IT 222633-22-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (amorphous substance of tricyclic triazolobenzazepine derivative having improved absorbability and solubility)
 RN 222633-22-9 CAPLUS
 CN Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 1-methylethyl ester (9CI) (CA INDEX NAME)

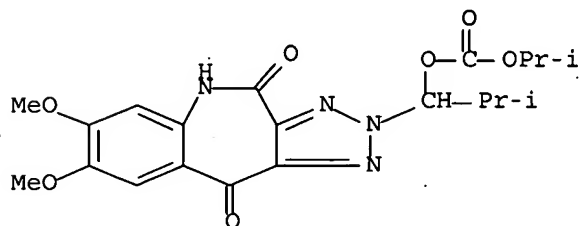


RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/500,157
 allowed
 crystalline form

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:532666 CAPLUS Full-text
 DN 139:95490
 TI Crystalline tricyclic triazolobenzazepine derivative
 IN Kitahara, Shin-Ichi; Furukawa, Hanae; Yamaguchi, Toshihiro; Miyamoto, Sachiko; Okada, Yumiko
 PA Meiji Seika Kaisha, Ltd., Japan
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 2

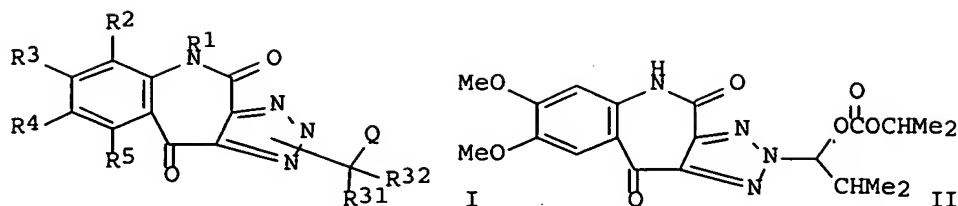
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003055885	A1	20030710	WO 2002-JP13557	20021225
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1469000	A1	20041020	EP 2002-790870	20021225
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2005020579	A1	20050127	US 2004-500157	20040625
PRAI	JP 2001-393016	A	20011226		
	WO 2002-JP13557	W	20021225		
AB	Crystalline 2-(1-isopropoxycarbonyloxy-2-methylpropyl)-7,8-dimethoxy-4(5-H),10-dioxo-2H-1,2,3-triazolo[4,5-c][1]benzazepine (I) (X ray crystallog. data given) is claimed. I is an antiallergic agent.				
IT	222633-22-9P				
	RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (crystalline tricyclic triazolobenzazepine derivative as antiallergic agent)				
RN	222633-22-9 CAPLUS				
CN	Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 1-methylethyl ester (9CI) (CA INDEX NAME)				



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:233920 CAPLUS Full-text
 DN 130:282073
 TI Preparation of tricyclic triazolobenzazepine derivatives as prodrugs for
 antiallergic agents
 IN Ohtsuka, Yasuo; Nishizuka, Toshio; Shiokawa, Sohjiro; Tsutsumi, Seiji;
 Kawaguchi, Mami; Kitagawa, Hideo; Takata, Hiromi; Shishikura, Takashi;
 Ishikura, Toyoaki; Fushihara, Kenichi; Okada, Yumiko; Miyamoto, Sachiko;
 Shiobara, Maki
 PA Meiji Seika Kaisha, Ltd., Japan
 SO PCT Int. Appl., 143 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9916770	A1	19990408	WO 1998-JP4363	19980929
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	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	CA 2305307	C	20041130		
	AU 9891869	A1	19990423	AU 1998-91869	19980929
	AU 744636	B2	20020228		
	EP 1026167	A1	20000809	EP 1998-944289	19980929
	EP 1026167	B1	20030305		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	TR 200000808	T2	20000821	TR 2000-200000808	19980929
	BR 9814055	A	20000926	BR 1998-14055	19980929
	JP 3188482	B2	20010716	JP 1999-519969	19980929
	TW 510902	B	20021121	TW 1998-87116198	19980929
	RU 2198885	C2	20030220	RU 2000-111517	19980929
	AT 233764	E	20030315	AT 1998-944289	19980929
	PT 1026167	T	20030731	PT 1998-944289	19980929
	ES 2191963	T3	20030916	ES 1998-944289	19980929
	SK 283869	B6	20040302	SK 2000-425	19980929
	NO 2000001500	A	20000518	NO 2000-1500	20000323
	MX 200003047	A	20001110	MX 2000-3047	20000328
	US 6372735	B1	20020416	US 2000-509494	20000329
	HK 1032782	A1	20041119	HK 2001-103502	20010522
	US 2002137739	A1	20020926	US 2002-73326	20020213
PRAI	JP 1997-264611	A	19970929		
	JP 1998-52063	A	19980304		
	WO 1998-JP4363	W	19980929		
	US 2000-509494	A3	20000329		
OS	MARPAT 130:282073				
GI					



AB Tricyclic triazolobenzazepine derivs. represented by general formula [I; R1 represents hydrogen, OH, alkyl, or phenylalkyl; R2, R3, R4, and R5 each represents hydrogen, halogeno, optionally protected hydroxyl, formyl, optionally substituted alkyl, alkenyl, alkoxy, etc.; Q represents a group selected among groups of OCO2R33, O2CR34, O2CNR35R36, OP(:O)(OR37)OR38, halogeno, or alkoxy; R33 and R34 each represent (un)substituted alkyl, Ph, or (un)saturated 5- to 7-membered ring heterocyclyl, etc.; and R35 and R36 each represent hydrogen or (un)substituted alkyl or NR35R36 forms a (un)saturated 5- to 7-membered ring heterocyclyl] in the form of a prodrug. and pharmacol. acceptable salts and solvates thereof are prepared These compds. have excellent bioavailability. Thus, 1.07 g Et 5-(4,5-dimethoxy-2-nitrobenzoyl)-1H-1,2,3-triazole-4-carboxylate (preparation given) and 53 mg p-MeC6H4SO3H.H2O were suspended in CH2Cl2 and stirred with 330 mg isobutyraldehyde at room temperature for 25 min, followed by adding 744 mg 1,1'-carbonyldiimidazole in 5.0 mL CH2Cl2, and the resulting mixture was stirred at room temperature for 3 h and then refluxed with 920 mg iso-Pr alc. to give 34% Et 2-(1-isopropoxycarbonyloxy-2-methylpropyl)-5-(4,5-dimethoxy-2-nitrobenzoyl)-1H-1,2,3-triazole-4-carboxylate. The latter compound was hydrogenated over Pd(OH)2 in EtOAc at room temperature for 15 h to give 99% Et 5-(2-amino-4,5-dimethoxybenzoyl)-2-(1-isopropoxycarbonyloxy-2-methylpropyl)-1H-1,2,3-triazole-4-carboxylate which was heated in AcOH at 100° for 2 h with stirring to give the title compound (II) in 62% yield. When II in 0.5% aqueous methylcellulose was administered p.o. to dogs or rats, the area under the concentration time curve (AUC) value was 1.2±0.3 µmol. h/L for dogs and 1.4±0.1 µmol. h/L for rats, which was 4-times higher in dog and 7-times higher in rats compared to that of its active form. A tablet and a fine powder formulation containing II were described.

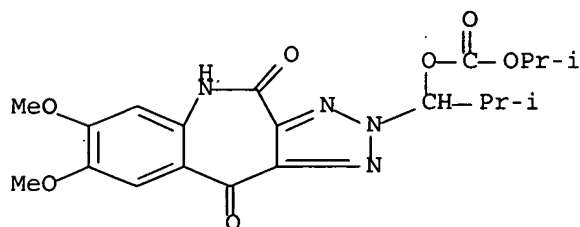
IT 222633-22-9P 222633-24-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic triazolobenzazepine derivs. as prodrugs for antiallergic agents)

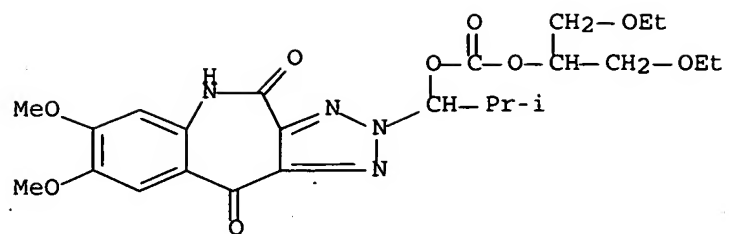
RN 222633-22-9 CAPLUS

CN Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 1-methylethyl ester (9CI) (CA INDEX NAME)



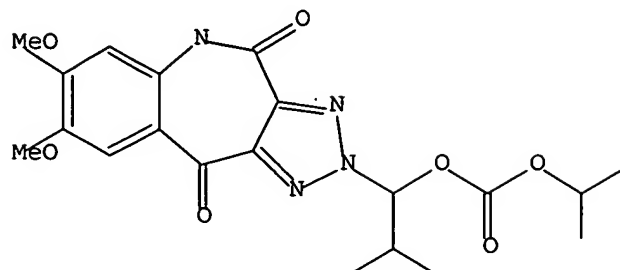
RN 222633-24-1 CAPLUS

CN Carbonic acid, 1-(5,10-dihydro-7,8-dimethoxy-4,10-dioxo-1,2,3-triazolo[4,5-c][1]benzazepin-2(4H)-yl)-2-methylpropyl 2-ethoxy-1-(ethoxymethyl)ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l2; d his; log y
L2 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.
L2 QUE ABB=ON PLU=ON L1

(FILE 'HOME' ENTERED AT 16:01:51 ON 03 AUG 2005)

FILE 'REGISTRY' ENTERED AT 16:02:00 ON 03 AUG 2005

L1 STRUCTURE UPLOADED
L2 QUE L1
L3 0 S L2
L4 2 S L2 FUL

FILE 'CAPLUS' ENTERED AT 16:02:27 ON 03 AUG 2005

L5 5 S L4

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	25.15	186.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.65	-3.65

STN INTERNATIONAL LOGOFF AT 16:02:59 ON 03 AUG 2005